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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,612	07/15/2003	Yin-Rong Hong	HONG3014/EM	5361
23364	7590	12/27/2004	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			WATKO, JULIE ANNE	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/618,612	Applicant(s) HONG, YIN-RONG	
	Examiner Julie Anne Watko	Art Unit 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Taiwan ROC on November 14, 2002. It is noted, however, that applicant has not filed a certified copy of the Taiwanese application as required by 35 U.S.C. 119(b).

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagatsuka (US Pat. No. 2002/0113503 A1).

As recited in claim 1, Nagatsuka shows a disc carrier assembly (see Fig. 1) for a spindle motor for an optical disc drive, the disc carrier assembly comprising: a rotor 11 including an end wall and a peripheral wall, a permanent ring magnet 12 being fixed to an inner periphery of the peripheral wall, the end wall having a central hole (see shape of 11 in Fig. 1); and a disc carrier 10 including a main plate having an inner side (below in Fig. 1) and an outer side (above in Fig. 1), the inner side of the main plate being in intimate contact with the end wall of the rotor, the

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main plate including an engaging portion on the inner side thereof, the engaging portion including an axial hole (see 18) through which a shaft 9 is securely extended, allowing joint rotation of the disc carrier and the shaft, the engaging portion further including an annular groove (see shape of 10 in Fig. 1) for securely receiving a peripheral wall portion delimiting the central hole of the end wall of the rotor, allowing joint rotation of the disc carrier and the rotor.

As recited in claim 4, Nagatsuka shows that the disc carrier and the rotor are integrally formed as a one-piece member. It is noted by the Examiner that the term "integrally formed as a one-piece member" is not limited to a fabrication of parts from a single piece of material, but is inclusive of other means for maintaining parts rigidly fixed together as a single piece. See *In re Larson*, 144 USPQ 347 (CCPA 1965).

As recited in claim 5, Nagatsuka shows that the end wall of the rotor further includes a stepped portion along a periphery thereof, the main plate including an annular rib formed on the inner side thereof for engaging with the stepped portion of the end wall of the rotor (see shapes of 10 and 11 in Fig. 1).

5. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang et al (US Pat. No. 6477001 B1).

Yang et al show a disc carrier assembly (see Fig. 2a) for a spindle motor for an optical disc drive, the disc carrier assembly comprising: a rotor 42 including an end wall and a peripheral wall, a permanent ring magnet 43 being fixed to an inner periphery of the peripheral wall, the end wall having a central hole (see shape of 42 in Fig. 2a); and a disc carrier 35 including a main plate having an inner side (below in Fig. 2a) and an outer side (above in Fig. 2a), the inner side of the main plate being in intimate contact with the end wall of the rotor, the

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main plate including an engaging portion on the inner side thereof, the engaging portion including an axial hole through which a shaft 25 is securely extended, allowing joint rotation of the disc carrier and the shaft, the engaging portion further including an annular groove (see 39) for securely receiving a peripheral wall portion delimiting the central hole of the end wall of the rotor, allowing joint rotation of the disc carrier and the rotor. Yang et al show that the disc carrier and the rotor are integrally formed as a one-piece member. It is noted by the Examiner that the term "integrally formed as a one-piece member" is not limited to a fabrication of parts from a single piece of material, but is inclusive of other means for maintaining parts rigidly fixed together as a single piece. See *In re Larson*, 144 USPQ 347 (CCPA 1965). **Claim Rejections - 35**

**USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatsuka (US Pat. No. 2002/0113503 A1).

Nagatsuka shows an assembly as described above.

As recited in claim 2, Nagatsuka is silent regarding whether the central hole of the end wall of the rotor and the annular groove of the disc carrier are non-circular.

It is noted by the Examiner that there is no invention in changing the shape of known parts, absent some showing of unexpected results due to the claimed shape. *In re Dailey*, 149 USPQ 47 (CCPA 1966).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the claimed shape in the design process as is notoriously well known in the art. The rationale is as follows: one of ordinary skill in the art would have been motivated to arrive at the claimed shape of the interface between the two materials during the design process in order to increase an adhesion force between the two materials, and further to achieve weight and mass distribution goals as is notoriously well known in the art.

Regarding claim 6: See teaching above for claim 5.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (US Pat. No. 6477001 B1).

Yang et al show an assembly as described above.

As recited in claim 2, Yang et al are silent regarding whether the central hole of the end wall of the rotor and the annular groove of the disc carrier are non-circular.

See rationale and motivation above for claim 2.

***Allowable Subject Matter***

9. Claims 3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

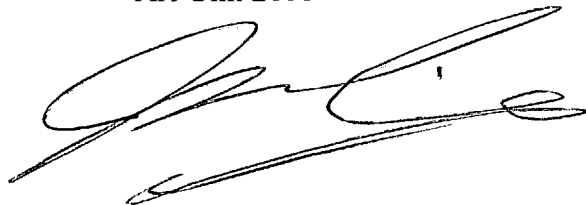
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (703) 305-7742. The examiner can normally be reached on Tues, Thurs and Fri 10AM-10PM, alternate Saturdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703)305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Julie Anne Watko  
Primary Examiner  
Art Unit 2653

December 22, 2004  
JAW

A handwritten signature in black ink, appearing to read 'Julie Anne Watko', with a long horizontal flourish extending to the right.